with a circular saw. The tibia is freshened by superficial section. If the patella can be retained, its surface may be cut and applied to the resected bones. Or, it may be extirpated. The ligamentum patellæ and capsule are sutured with deep, continuous catgut suture. A drain is placed corresponding at each side to the space between the bones, and another through an opening at the extremity of the bursa extensoria. The Esmarch bandage is removed after the extremity is put up in splint.—*Deutsche Zeitschr f. Chir.* Bd. xxiv, heft 5 and 6.

IV. The Discussion and Therapy of Genu Valgum, and Varum. By Dr. G. MIDDELDORPF (Wurzburg). The author records 30 operations, occurring in the surgical clinic of Prof. Maas. These operations were performed upon 23 patients, ranging from three to twenty years of age. The operations were for the removal of genu valgum (28) and genu varum (2). In 16 cases the deformity was unilateral and six times bilateral. Rachitis was an etiological factor in four cases (3, 5 and 17 years of age respectively). In the rachitic form of the disease, the bloody operation, as a rule, was performed. Genu valgum staticum occurred in 13 patients ages varying from 15 to 22 years. Two cases of congenital patella luxations were aged 26 and 11 years when operated upon. Of the above cases 19 were males. The patients with genu valgum adolescens were bakers (3), locksmiths (3), merchants (2), cabinet makers, type setters, mechanics and servants. Esmarch's bandage was used in most cases. The author notes the use by Maas of the ordinary chisel and wooden mallet in wedge-shaped osteotomy. M'cewen's osteotome is used in the linear osteotomy. In double (bilateral) deformity the operation should be performed in one sitting. In operations on the tibia and fibula Maas operates according to Schede with a somewhat modified technique. After making an **H** or + shaped incision in the periosteum over the tibia he cuts out (chisels) a wedge shaped piece not extending through the whole thickness of the shaft. The base of the wedge varies with the age of the patient and the amount of deformity. The fibula is then chiseled through. The periosteum of the tibia is sewed with catgut, the wound cleaned with acetate of aluminum sol., and the whole dressed with protective and a permanent dressing of 5% sublimate and iodic chloride glycerine gauze. The extremity is fixed and suspended for hours. After application of stiff bandage over the splints, the Esmarch's bandage is loosened. In no case was subsequent hæmorrhage observed. Drainage is superfluous.

The author then discusses the osteotomies about the knee joint including Macewen's operation.—*Deutzche Zeitschr f. Chir.* Bd. xxiv, heft. 1 and 2.

HENRY KOPLIK (New York)

V. Recurrent Sarcoma in Clavicle; Excision of Clavicle; Death from Secondary Growth in Brain. By CHRISTOPHER HEATH (London.) The patient, aged thirty, stated on admission that about four years ago he had had a tumor removed from the tissues over the outer part of his left clavicle, and this growth had been present twelve months before its removal. There was no recurrence of the disease until about three months ago, when he fell and sustained a fracture of his left clavicle, soon after which a swelling of this bone was noticed. On examination the scar three inches and a half long was situated over the outer part of the clavicle. The bone was broken about the middle, and the inner end of the outer fragment was displaced inwards behind the outer end of the inner fragment. Surrounding the broken ends there was a soft solid growth, measuring one inch and a half in diameter; distinct expansile pulsation could be felt in it. No enlarged glands could be found nor signs of internal recurrence. The sixth day after admission Heath made an incision along the entire length of the clavicle, and divided the attachments of the muscles to the bone. The anterior part of the capsule of the sterno-clavicular joint was divided with the knife and the posterior part was torn through with a periosteal elevator; the sternal end of the bone was then pried up and the rhomboid ligament divided with a scalpel; the sternal end of the bone was then wrenched forwards and torn free from the subjacent tissues; the acromial end was easily separated from the adjacent tissues, disarticulated and removed. During the latter part of the operation the transverse cervical and suprascapular arteries were